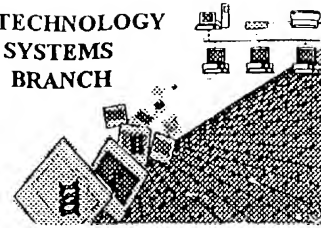# RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: _10/750,939_
Source: _IFWO_
Date Processed by STIC: _1/14/04_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY
FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 703-308-4212; FAX: 703-308-4221
Effective 12/13/03: TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 4.1 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
        http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to (EFFECTIVE 12/01/03):
   U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/03

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: 10 750,939

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1____Wrapped Nucleics
Wrapped Aminos — The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."

2____Invalid Line Length — The rules require that a line not exceed 72 characters in length. This includes white spaces.

3____Misaligned Amino Numbering — The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.

4____Non-ASCII — The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.

5____Variable Length — Sequence(s)____contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

6____PatentIn 2.0 "bug" — A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.

7____Skipped Sequences (OLD RULES) — Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

8____Skipped Sequences (NEW RULES) — Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000

9____Use of n's or Xaa's (NEW RULES) — Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

10____Invalid <213> Response — Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence

11__✓__Use of <220> — Sequence(s) *1-9, 12-15, 17-20* missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32)   (Sec. 1.823 of Sequence Rules)

12____PatentIn 2.0 "bug" — Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13____Misuse of n/Xaa — "n" can only represent a single <u>nucleotide</u>; "Xaa" can only represent a single <u>amino acid</u>

```
RAW SEQUENCE LISTING                           DATE: 01/14/2004
PATENT APPLICATION:  US/10/750,939             TIME: 11:00:18

Input Set : A:\niles non-provisional-US.txt
Output Set: N:\CRF4\01142004\J750939.raw
```

```
        3 <110> APPLICANT: Niles, Edward
        5 <120> TITLE OF INVENTION: Novel Inhibitors of Poxvirus Replication
        7 <130> FILE REFERENCE: 11520.0333
C-->    9 <140> CURRENT APPLICATION NUMBER: US/10/750,939
       10 <141> CURRENT FILING DATE: 2004-01-02
       12 <150> PRIOR APPLICATION NUMBER: US/60/437,945
       13 <151> PRIOR FILING DATE: 2003-01-02
       15 <160> NUMBER OF SEQ ID NOS: 20
       17 <210> SEQ ID NO: 1
       18 <211> LENGTH: 7
       19 <212> TYPE: RNA
       20 <213> ORGANISM: Artificial Sequence
       22 <220> FEATURE:
       23 <221> NAME/KEY: unsure
       24 <222> LOCATION: 6
       25 <223> OTHER INFORMATION: n is g,a,u or c
       27 <400> SEQUENCE: 1
W-->   28 uuuuunu  7
       30 <210> SEQ ID NO: 2
       31 <211> LENGTH: 7
       32 <212> TYPE: DNA
       33 <213> ORGANISM: artificial sequence
       35 <220> FEATURE:
       36 <223> OTHER INFORMATION:
W-->   38 <400> 2
       39 ttttttt  7
       42 <210> SEQ ID NO: 3
       43 <211> LENGTH: 22
       44 <212> TYPE: RNA
       45 <213> ORGANISM: artificial sequence
       47 <220> FEATURE:
       48 <221> NAME/KEY: unsure
       49 <222> LOCATION: 14
       50 <223> OTHER INFORMATION: n is g,a,u or c
       52 <400> SEQUENCE: 3
W-->   53 gggccggcuu uuunuuugcg uu  22
       56 <210> SEQ ID NO: 4
       57 <211> LENGTH: 22
       58 <212> TYPE: RNA
       59 <213> ORGANISM: artificial sequence
       61 <220> FEATURE:
       62 <223> OTHER INFORMATION:
W-->   64 <400> 4
```

Handwritten annotations:

Does Not Comply
Corrected Diskette Needed

Please explain, see item # (pg.1-5)
11 on error summary sheet.

Per New Sequence Rules, if <213>
Response is Artificial
Sequence / Unknown please
explain in section <220>
- <223>. please see
item # 11 on error
summary sheet.

please explain

same error

RAW SEQUENCE LISTING   DATE: 01/14/2004
PATENT APPLICATION: **US/10/750,939**   TIME: 11:00:18

Input Set : **A:\niles non-provisional-US.txt**
Output Set: **N:\CRF4\01142004\J750939.raw**

```
     65 gggccggcaa uuauuaugcg uu   22
     68 <210> SEQ ID NO: 5
     69 <211> LENGTH: 36
     70 <212> TYPE: RNA
     71 <213> ORGANISM: artificial sequence    — please explain, same error
     73 <220> FEATURE:
     74 <221> NAME/KEY: unsure
     75 <222> LOCATION: 23
     76 <223> OTHER INFORMATION: n is g,a,u or c
     78 <400> SEQUENCE: 5
W--> 79 gggcgaauug ggccggcuuu uunuuugcgu ugaauu  36
     82 <210> SEQ ID NO: 6
     83 <211> LENGTH: 36
     84 <212> TYPE: RNA
     85 <213> ORGANISM: artificial sequence — same error
     87 <220> FEATURE:
W--> 88 <221> NAME/KEY:
     89 <222> LOCATION:
     90 <223> OTHER INFORMATION: uracils at 8,9,18-26, 30, 31, 35 and 36 are brominated
     92 <400> SEQUENCE: 6
     93 gggcgaauug ggccggcuuu uuuuuugcgu ugaauu  36
     95 <210> SEQ ID NO: 7
     96 <211> LENGTH: 27
     97 <212> TYPE: DNA
     98 <213> ORGANISM: artificial sequence
    100 <220> FEATURE:
    101 <223> OTHER INFORMATION:         — same error
W--> 103 <400> 7
    104 aattgggccg gctttttttt tgcgttg      27
    107 <210> SEQ ID NO: 8
    108 <211> LENGTH: 22
    109 <212> TYPE: DNA
    110 <213> ORGANISM: artificial sequence — same error
    112 <220> FEATURE:
W--> 113 <221> NAME/KEY:
    114 <222> LOCATION:
    115 <223> OTHER INFORMATION: 9-17 is deoxyuracil
    117 <400> SEQUENCE: 8
    118 gggccggcuu uuuuuugcg uu   22
    121 <210> SEQ ID NO: 9
    122 <211> LENGTH: 22
    123 <212> TYPE: RNA
    124 <213> ORGANISM: artificial sequence — same error
    126 <220> FEATURE:
W--> 127 <221> NAME/KEY:
    128 <222> LOCATION:
    129 <223> OTHER INFORMATION: 19-17 is brominated deoxyuracil
    131 <400> SEQUENCE: 9
    132 gggccggcuu uuuuuugcg uu   22
```

RAW SEQUENCE LISTING   DATE: 01/14/2004
PATENT APPLICATION: US/10/750,939   TIME: 11:00:18

Input Set : **A:\niles non-provisional-US.txt**
Output Set: **N:\CRF4\01142004\J750939.raw**

```
     134 <210> SEQ ID NO: 10
     135 <211> LENGTH: 22
     136 <212> TYPE: DNA
     137 <213> ORGANISM: artificial sequence
     139 <220> FEATURE:
W--> 140 <221> NAME/KEY:
     141 <222> LOCATION:
     142 <223> OTHER INFORMATION: T5NT
     144 <400> SEQUENCE: 10
     145 gggccggctt tttttttgcg uu   22
     148 <210> SEQ ID NO: 11
     149 <211> LENGTH: 22
     150 <212> TYPE: DNA
     151 <213> ORGANISM: artificial sequence
     153 <220> FEATURE:
W--> 154 <221> NAME/KEY:
     155 <222> LOCATION:
     156 <223> OTHER INFORMATION: mutant T5NT
     158 <400> SEQUENCE: 11
     159 gggccggcaa ttattatgcg tt   22
     161 <210> SEQ ID NO: 12
     162 <211> LENGTH: 17
     163 <212> TYPE: RNA
     164 <213> ORGANISM: artificial sequence         SAme error
     166 <220> FEATURE:
     167 <221> NAME/KEY: unsure
     168 <222> LOCATION: 10
     169 <223> OTHER INFORMATION: n is a,g,u or c
     171 <400> SEQUENCE: 12
W--> 172 cggcuuuuun uuugcgu   17
     174 <210> SEQ ID NO: 13
     175 <211> LENGTH: 13
     176 <212> TYPE: RNA
     177 <213> ORGANISM: artificial sequence        SAme error
     179 <220> FEATURE:
     180 <221> NAME/KEY: unsure
     181 <222> LOCATION: 8
     182 <223> OTHER INFORMATION: n is a,g, u or c
     184 <400> SEQUENCE: 13
W--> 185 gcuuuuunuu ugc   13
     188 <210> SEQ ID NO: 14
     189 <211> LENGTH: 9
     190 <212> TYPE: RNA
     191 <213> ORGANISM: artificial sequence     SAme error
     193 <220> FEATURE:
     194 <221> NAME/KEY: unsure         there is a "u" at this location.
     195 <222> LOCATION: 7
     196 <223> OTHER INFORMATION: n is a,g,u or c
     198 <400> SEQUENCE: 14
```

RAW SEQUENCE LISTING   DATE: 01/14/2004
PATENT APPLICATION: US/10/750,939   TIME: 11:00:18

Input Set : **A:\niles non-provisional-US.txt**
Output Set: **N:\CRF4\01142004\J750939.raw**

W--> 199 uuuuuruuu 9
     202 <210> SEQ ID NO: 15
     203 <211> LENGTH: 7
     204 <212> TYPE: RNA
     205 <213> ORGANISM: artificial sequence —SAme error
     207 <220> FEATURE:
     208 <221> NAME/KEY: unsure
     209 <222> LOCATION: 6
     210 <223> OTHER INFORMATION: n is a,g,u or c
     212 <400> SEQUENCE: 15
W--> 213 **uuuuunu 7**
     216 <210> SEQ ID NO: 16
     217 <211> LENGTH: 7
     218 <212> TYPE: RNA
     219 <213> ORGANISM: artificial sequence
     221 <220> FEATURE:
W--> 222 **<221> NAME/KEY:**
     223 <222> LOCATION:
     224 <223> OTHER INFORMATION: mutant 7-mer
     226 <400> SEQUENCE: 16
     227 uuuuuau 7
     229 <210> SEQ ID NO: 17
     230 <211> LENGTH: 22
     231 <212> TYPE: DNA
     232 <213> ORGANISM: artificial sequence —SAme error
     234 <220> FEATURE:
     235 <221> NAME/KEY: unsure
     236 <222> LOCATION: 14
     237 <223> OTHER INFORMATION: n is g,a,u or c; 1-8 and 18-22 are DNA ?   *FYI: u's are at locations 21 and 22*
     239 <400> SEQUENCE: 17
W--> 240 gggccggcuu uuunuuugcg uu 22
     242 <210> SEQ ID NO: 18
     243 <211> LENGTH: 22
     244 <212> TYPE: RNA
     245 <213> ORGANISM: artificial sequence —SAme error
     247 <220> FEATURE:
     248 <221> NAME/KEY: unsure
     249 <222> LOCATION: 14
     250 <223> OTHER INFORMATION: n is g,a,u or c; 1-8 and 18-22 are 2'O methylated; 1-8 and
17-22 have phosphorthiol bonds
     252 <400> SEQUENCE: 18
W--> 253 gggccggcuu uuunuuugcg uu 22
     255 <210> SEQ ID NO: 19
     256 <211> LENGTH: 22
     257 <212> TYPE: DNA
     258 <213> ORGANISM: artificial sequence —SAme error
     260 <220> FEATURE:
     261 <221> NAME/KEY: unsure
     262 <222> LOCATION: 14
     263 <223> OTHER INFORMATION: n is g,a,u or c; 1-8 and 18-22 are phosphorthiols; 9-17 are
RNA

RAW SEQUENCE LISTING   DATE: 01/14/2004
PATENT APPLICATION: **US/10/750,939**   TIME: 11:00:18

Input Set : **A:\niles non-provisional-US.txt**
Output Set: **N:\CRF4\01142004\J750939.raw**

```
      265 <400> SEQUENCE: 19
W--> 266 gggccggcuu uuunuuugcg uu   22
      268 <210> SEQ ID NO: 20
      269 <211> LENGTH: 7
      270 <212> TYPE: RNA
    . 271 <213> ORGANISM: artificial sequence
      273 <220> FEATURE:
      274 <223> OTHER INFORMATION:
W--> 276 <400> 20
      277 uuuuauu   7
```

same error

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 01/14/2004
PATENT APPLICATION: **US/10/750,939**   TIME: 11:00:19

Input Set : **A:\niles non-provisional-US.txt**
Output Set: **N:\CRF4\01142004\J750939.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 6
Seq#:3; N Pos. 14
Seq#:5; N Pos. 23
Seq#:12; N Pos. 10
Seq#:13; N Pos. 8
Seq#:14; N Pos. 6
Seq#:15; N Pos. 6
Seq#:17; N Pos. 14
Seq#:18; N Pos. 14
Seq#:19; N Pos. 14

Invalid Line Length:
The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:18; Line(s) 250

VERIFICATION SUMMARY DATE: 01/14/2004
PATENT APPLICATION: **US/10/750,939**   TIME: 11:00:19

Input Set : **A:\niles non-provisional-US.txt**
Output Set: **N:\CRF4\01142004\J750939.raw**

```
L:9 M:270 C: Current Application Number differs, Replaced Application Number
L:28 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:38 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:2,Line#:36
L:53 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:64 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:4,Line#:62
L:79 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:88 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:6
L:103 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:7,Line#:101
L:113 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:8
L:127 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:9
L:140 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:10
L:154 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:11
L:172 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
L:185 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
L:199 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
L:213 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
L:222 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:16
L:240 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
L:253 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0
L:266 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0
L:276 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:20,Line#:274
```